OHIO SPORT FISH CONSUMPTION ADVISORY

OHIO DEPARTMENT OF HEALTH YEAR 2001 FISHING SEASON

What Health Benefits do I get From Eating Sport Fish?

Fish are nutritious and good to eat. Many doctors suggest that eating one half-pound of fish each week helps to prevent heart disease. Almost any kind of fish may have real health benefits when it replaces a high-fat source of protein in the diet. Fish, eaten often, provide valuable vitamins and minerals, high-quality protein, and beneficial oils that are low in saturated fat.



Why is a Fish Consumption Advisory Needed?

While most Ohio sport fish are of high quality, low levels of chemicals like polychlorinated biphenyls (PCBs), mercury, and lead have been found in some fish from certain waters. To ensure the continued good health of Ohioans, the Ohio Department of Health offers an advisory for how often these fish can be safely eaten. An advisory is advice, and should not be viewed as law or regulation. It is intended to help anglers and their families make educated choices about: Where you fish, what types of fish you eat, how to limit the amount and frequency of fish you consume, and how you prepare fish for cooking.

By following these advisories, you can get the health benefits of fish and reduce unwanted contaminants.

What Groups are Most Sensitive to Contaminants?

Contaminants in fish can be harmful to people of all ages, but the fetus and young children are especially sensitive to contaminants because their organs and systems are not yet fully developed. They are less able than an adult is to deal with toxic substances. Contaminants in fish can affect your baby more than they affect you and can be hard to detect. It is best to prevent childhood exposure to fish contaminants in the first place. In summary, the most sensitive groups are unborn children, and children age six and under. This also includes women who plan to become pregnant, women who are pregnant, and nursing mothers.

Health Effects From Eating Contaminated Fish

What Contaminants are in Fish?

Contaminants that are found in some Ohio fish include PCBs, pesticides, and heavy metals such as lead and methyl mercury. The contaminants responsible for most advisories are methyl mercury and PCBs.

What is Methyl Mercury?

Mercury is a metal that occurs in nature. It does not break down, but recycles between land, air, and water. Mercury may be released to the atmosphere by active volcanoes, coal-burning power plants, and burning of industrial or household wastes. Bacteria in sediments convert mercury to methyl mercury, an organic compound. Methyl mercury builds up in fish through the food chain. Nearly all of the mercury found in fish is methyl mercury.

What are Polychlorinated Biphenyls (PCBs)?

Polychlorinated biphenyls (PCBs) are man-made oils that were once used in carbonless copying paper and in electrical equipment such as capacitors, transformers, and fluorescent light ballasts. PCBs break down very slowly in the environment. PCBs tend to stay in sediments and build up in fish through the food chain.

How do Methyl Mercury and PCBs Affect Human Health?

The levels of these compounds found in Ohio fish are not known to cause immediate severe sickness. Long-lasting contaminants such as polychlorinated biphenyls (PCBs) and mercury can build up in your body over time. It may take months or years of regularly eating contaminated fish to build up amounts that are a health concern. Health problems that may result from the contaminants in fish range from small, hard to detect health changes to birth defects, as well as mental and physical retardation in newborns. Mothers who eat highly contaminated fish for many years before becoming pregnant may have children who are slower to develop and learn. Therefore, women who plan to become pregnant should follow the fish consumption advice given to pregnant and nursing women for several years before becoming pregnant. It takes up to six years or more for the body to get rid of PCBs, and up to one year to get rid of mercury.

The advisories that protect sensitive populations also protect all other members of the general public.

Should I Stop Eating Fish?

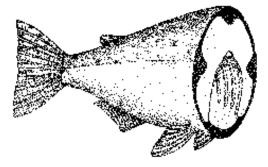
We are NOT recommending that you stop eating sport fish, except where "Do not eat" is shown in the advisory. As stated earlier in this fact sheet, eating fish regularly offers several health benefits. If you follow this fish advisory booklet carefully to: choose safer places to fish, pick safer species to eat, trim and cook your catch correctly, and follow the recommended meal frequency, you will gain those benefits. At the same time you will reduce your exposure to possible contaminants.

How Can I Reduce my Health Risk?

Choose smaller fish (within the legal size limit) - smaller fish within a species tend to have fewer contaminants than older, larger fish, and are sometimes tastier and more tender.

Choose leaner fish. Fish that are higher in fat - Channel Catfish and Carp, for example, will likely have more fat and may have higher levels of PCBs and similar chemicals in their bodies. Yellow Perch, Sunfish, and Crappies are examples of lean fish.

Trim and cook your fish properly to reduce risk. This is important because all meal advice given in the advisory assumes that this has been done. Proper preparation reduces your exposure to organic chemicals like PCBs and certain pesticides. More than 50 percent of these contaminants can be eliminated by trimming fatty areas before cooking and by cooking fish in ways that allow fat to drip away. Mercury levels cannot be reduced by trimming because mercury binds to protein (the meat portion) of the fish.



Trimming and Cooking Fish

Fillet the fish.

Remove all skin from fillets or steaks. This allows fat to drain away from the fish during cooking.

Trim off the fatty areas that are shown in black on the drawing. These include the fatty areas found along the belly, back, and both sides of the fillet.

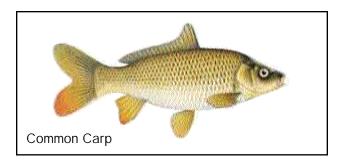
Cook so that the fat drips away. Broil, bake, or grill on a rack, or poach and discard the liquid.

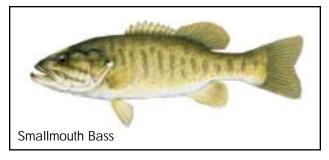
If you deep-fry your catch, discard the oil. Pan frying removes few, if any contaminants.

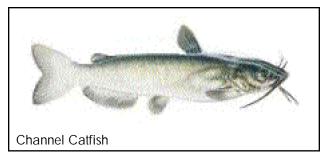
If you prepare soups or chowders from fish, be aware that this cooking method holds in juices that contain fat (and contaminants) from the fish.

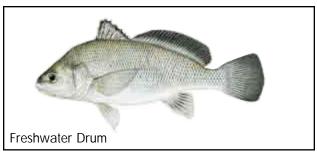
Ohio Sport Fish Most Often Under Advisory

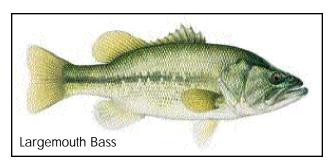
Illustrations © Joseph R. Tomelleri — Courtesy of ODNR/Division of Wildlife













Types of Advisories

There are three types of fish consumption advisories:

- 1. Do Not Eat Check here first to find out if your catch is listed. These fish have higher levels of contaminants, and should not be eaten.
- 2. Meal Advice These fish have low levels of contaminants, but are safe to eat provided the trimming, cooking, and meal frequency advice is followed.
- 3. Statewide advisory for sensitive populations.
- 4. Another advisory is issued that cautions against dermal (skin) contact:

 The waters and/or sediments in these areas have high levels of contaminants. It is recommended that a person not swim or wade in these water body sections.

How to use this Advisory

Three Easy Steps!

Column 1		Column 2	Column 3
Body of Water	Area Under Advisory	Species	One meal per
Nemo River	U.S. 71 to Xeno River	Halibut under 20"	Week
		Halibut 20"	Month
		and over	

^{*}One meal is assumed to be 8 ounces (weighed before cooking).

- 1. In column 1, find the body of water and location in which you are fishing.
- 2. In column 2, find the kind of fish you have caught. If a length is noted, measure the fish from the tip of the nose to the end of the tail fin.
- 3. The maximum recommended meal frequency for the size and type of fish is found in column 3.

Do not eat! Ohio Department of Health Consumption Advisory

Body of Water	Area Under Advisory	Species
Dicks Creek	Oxford St, Middletown to the Great Miami River	All
Great Miami River	Lowhead Dam at Monument Ave, Dayton to the Ohio River	All Suckers
Lake Erie	All Waters	Channel Catfish 16" and over
Lake Nesmith (Summit County)	All Waters	Channel Catfish, Common Carp
Little Scioto River	SR 739, near Marion to Holland Rd, near Marion	All
Mahoning River	NW Bridge Rd, Warren to Pennsylvania Border	Channel Catfish, Common Carp
Maumee River	Mouth to Waterville	Channel Catfish
Middle Fork Little Beaver Creek	SR alt 14 at Allen Rd to Little Beaver Creek	All
Ohio River	All Waters	Channel Catfish 17" and over, Common Carp
Ottawa River (Toledo)	I-475 N of Wildwood Preserve, Toledo to Maumee Bay, Lake Erie	All
Portage Canal (a.k.a.) Ohio Canal (Summit County)	All Waters	Channel Catfish, Common Carp
Summit Lake (Summit County)	All Waters	Channel Catfish, Common Carp

Statewide Advisory for Sensitive Populations!

Mercury - This statewide advisor y, issued in 1997, is for women of child bearing age and young children (age six and under) only. They are advised to eat not more than one meal per week of fish (any species) from any Ohio body of water, and not more than one meal a month, or one meal every two months if specified in the following table. This precaution applies only to these sensitive populations. Anyone else should follow the consumption guidelines per species and per body of water.

Meal Advice ODH Consumption Advisory

Body of Water	Area Under Advisory	Species	One meal per
Lake Erie	All Waters	Chinook Salmon under 19", Freshwater Drum, Smallmouth Bass, Walleye	Week
		Chinook Salmon 19" and over, Coho Salmon, Common Carp, Steelhead Trout White Bass, Whitefish, White Perch	Month t,
		Channel Catfish under 16", Lake Trout	2 Months
Adams Lake (Adams County)	All Waters	Bluegill Sunfish Largemouth Bass	Month
Berlin Lake	All Waters	Channel Catfish	Month
Eastwood Lake	All Waters	Common Carp	Month
Findely Lake (Lorain County)	All Waters	Largemouth Bass	Month
Highlandtown Lake	All Waters	Largemouth Bass	Month
Jefferson Lake (Jefferson County)	All Waters	Largemouth Bass	Month
New Lyme Lake	All Waters	Common Carp	Month
Walborn Reservoir	All Waters	Largemouth Bass	Month
Conneaut Creek	All Waters	Smallmouth Bass	Month
Greenville Creek	All Waters	Smallmouth Bass	Month
Little Beaver Creek	All Waters	Common Carp, Sauger Channel Catfish	Month 2 Months
Mill Creek (Cincinnati)	From I-275 to the Ohio River	All Species	Month
Nimishillen Creek	All Waters	Common Carp	Month
Paint Creek	All Waters	Largemouth Bass	Month
Salt Creek	Laurelville to Queer Creek Confluence	Smallmouth Bass	Month
Sandy Creek	All Waters	Common Carp	Month
Scippo Creek	Kingston Pike to Scioto River	All Species	Month
Symmes Creek	SR 141, Waterloo to Ohio River	Freshwater Drum, Sauger	Month
Twin Creek	All Waters	Channel Catfish	Week
Walnut Creek, Scioto R. Tri.	All Waters	Channel Catfish	Month

Body of Water	Area Under Advisory	Species	One meal per
Ashtabula River	24th St. Bridge to Lake Erie	Smallmouth Bass Largemouth Bass, Walleye	Week Month
		Channel Catfish, Common Carp	2 Months
Auglaize River	U. S. 33, Wapakoneta to Maumee River, Defiance	Channel Catfish, Common Carp	Week
Black River	31st Street Bridge, Sheffield to Lake Erie	Brown Bullhead, Freshwater Drum	Week
Chagrin River	All Waters	Common Carp Rock Bass, Smallmouth Bass	Month Month
Cuyahoga River	Ohio Edison Dam Pool to Lake Erie	White Sucker under 11" Common Carp, White Sucker 11" and over	Week Month
		Largemouth Bass Brown Bullhead,	Month 2 Months
		Yellow Bullhead	Z WOTHIS
Ford (a.k.a.) Hamilton Hydraulic Canal	All Waters	Channel Catfish, Common Carp	Month
Grand River	All Waters	Common Carp under 22"	Week
		Common Carp 22" & over, Freshwater Drum, Largemouth Bass, Silver Redhorse, Smallmouth Bass, Yellow Bullhead	Month
	Upstream Tote St. Austinburg	Walleye	Month
Great Miami River	All Waters	Saugeye	Week
		Largemouth Bass, Rock Bass, Smallmouth Bass, White Bass	Month
	North of SR 73,	Channel Catfish	Week
	near Middletown to Indian Lake	Common Carp	Month
	S of SR 73 near Middletown to the Ohio River	Channel Catfish, Freshwater Drum, Smallmouth Buffalo	Month
		Common Carp, Flathead Catfish Striped Bass Hybrid	2 Months
Hocking River	All Waters	Common Carp	Month
Huron River	All Waters	Freshwater Drum	Month
Jefferson Lake (Jefferson County)	All Waters	Largemouth Bass	Month
Little Miami River	All Waters	Channel Catfish, Smallmouth Bass	Week
		Sauger	Month
Little Miami River, E. Fork	All Waters	Channel Catfish, Flathead Catfish, Rock Bass, Smallmouth Bass, Spotted Bass	Month

Body of Water	Area Under Advisory	Species	One meal per
Little Muskingum River	Hill's Covered Bridge to the Ohio River	Spotted Bass	Month
Little Scioto River, SE Ohio R. Trib.	All Waters	Rock Bass, Spotted Bass	Month
Mad River	U. S. 36 Urbana to Dayton	White Sucker Common Carp, Largemouth Bass	Week Month
Mahoning River	Berlin Dam to Pennsylvania Border	Smallmouth Bass	Month
	NW Bridge Rd, Warren to the Pennsylvania Border	White Crappie Walleye	Week Month
Maumee River	All Waters	Common Carp, Smallmouth Bass	Month
	Waterville to the Indiana Border	Channel Catfish	Week
	Mouth to Waterville	Freshwater Drum, Largemouth Bass	Week
Muskingum River	All Waters	Channel Catfish, Flathead Catfish, Saugeye, Spotted Bass	Week
		White Bass	Month
Ohio River	All Waters	Largemouth Bass, Smallmouth Bass, Spotted Bass, Sauger, Walleye under 17" Freshwater Drum, White Bass, Hybrid Striped Bass,	Week
		Walleye 17" & over Flathead Catfish, Channel Catfish under 17"	2 Months
Ottawa River (Lima)	All Waters	Channel Catfish	Week
Portage River	Ohio Turnpike to Lake Erie	Largemouth Bass, Smallmouth Bass	Week
		Channel Catfish, Common Carp	Month
Sandusky River	All Waters	Common Carp Channel Catfish, Largemouth Bass	Week Month
Scioto River	All Waters	Flathead Catfish under 21", Largemouth Bass, Sauger, Saugeye	Week
		Channel Catfish, Common Carp under 20", Flathead Catfish 21" & over Freshwater Drum	Month
	Green Camp to Warrensburg	Common Carp 20" & over Rock Bass	2 Months Month
Stillwater River	All Waters	Channel Catfish, Smallmouth Bass	Month
St. Joseph River	All Waters	Channel Catfish	Month

Body of Water	Area Under Advisory	Species	One meal per
St. Joseph River, West Branch	All Waters	All Species	Week
St. Mary's River	All Waters	Freshwater Drum Northern Pike, Saugeye	Month
Tiffin River	All Waters	Smallmouth Bass	Month
Tuscarawas River	Turkeyfoot Rd (SR 619), Barberton to South Broadway St. (SR 416), New Philadelphia (Tuscarawas County)	Largemouth Bass, Rock Bass Channel Catfish, Smallmouth Bass, Yellow Bullhead Common Carp	Week Month 2 Months
Vermilion River	All Waters	Largemouth Bass	Month
Walhonding River	All Waters	Saugeye, Smallmouth Bass Channel Catfish	Week Month

ODH Dermal Contact Advisory! Avoid Swimming or Wading in these Stream Sections

Body of Water	Area Under Advisory
Black River	31st St Bridge, Lorain to Lake Erie
Little Scioto River	SR 739, near Marion to Holland Rd, near Marion
Mahoning River	NW Bridge Rd, Warren to Pennsylvania Border
Middle Fork Little Beaver Creek	SR alt 14 at Allen Rd, to SR 11, south of Lisbon
Ottawa River (Toledo)	I-475 N of Wildwood Preserve, Toledo to Maumee Bay, Lake Erie

For more information contact:

Ohio Department of Health

Health Assessment Section

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